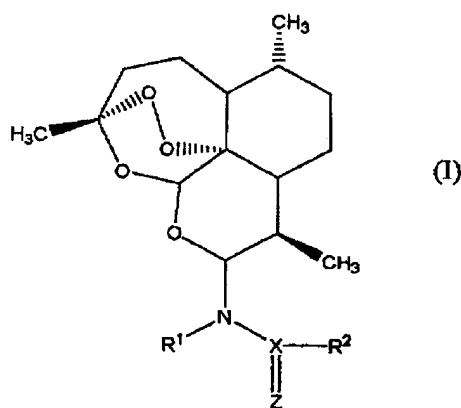


**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A compound of the formula I:



or a salt thereof, or a solvate thereof, or a solvate of a salt thereof,

in which

- $R^1$  represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group;
- $X$  represents a carbon atom, a sulfur atom, a sulfoxide group  $S=O$  or a group  $PR^3$ ,  $P-O-R^3$  or  $P-N(R^4)-R^3$  where  $R^3$  and  $R^4$  each independently represent a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group;

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**Z** represents an oxygen atom, a sulfur atom or a group  $\text{NR}^5$  where  $\text{R}^5$  represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group; and

**R<sup>2</sup>** represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group, or a group  $\text{N}(\text{R}^6)_2$ ,  $\text{NHNH}_2$ ,  $\text{NR}^6\text{NHR}^6$  or  $\text{NR}^6\text{N}(\text{R}^6)_2$ , or a group  $\text{OR}^6$  or  $\text{SR}^6$  where each  $\text{R}^6$  independently represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group, or a 10 $\alpha$ -dihydroartemisinin group, or  $\text{R}^2$  represents a group  $\text{OR}^7$  or  $\text{NR}^6\text{R}^7$  where  $\text{R}^6$  represents a group as defined above and  $\text{R}^7$  represents a bond attached as a substituent to  $\text{R}^5$  together with the group  $-\text{X}=\text{Z}-$  forming an optionally substituted heterocyclic group where  $\text{Z}$  represents a group  $\text{NR}^5$ , or  $\text{R}^7$  represents a bond attached as a substituent to  $\text{R}^1$  together with the group  $-\text{N}-\text{X}(=\text{Z})-$  forming an optionally substituted heterocyclic pyranyl, piperidinyl, pyrrolidinyl, dioxanyl, piperazinyl, morpholinyl, thiomorpholinyl, morpholinylsulphonyl, tetrahydroisoquinolinyl or tetrahydrofuranlyl group.

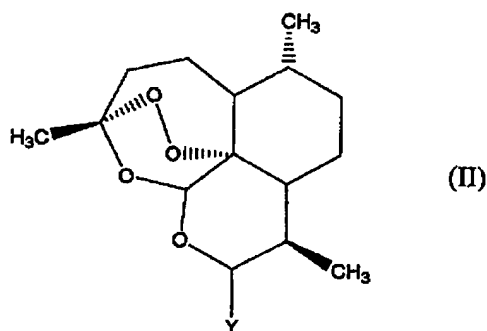
2. (Previously Presented) A compound according to claim 1 in which  $\text{R}^1$  represents a hydrogen atom, a methyl group, ethyl group or longer straight-chain alkyl group or a branched alkyl group containing up to 9 carbon atoms.
3. (Previously Presented) A compound according to claim 1 in which  $\text{X}$  represents a carbon atom, a sulfur atom, or a group  $\text{PR}^3$ ,  $\text{P}-\text{O}-\text{R}^3$  or  $\text{P}-\text{N}(\text{R}^4)-\text{R}^3$  where  $\text{R}^3$  and  $\text{R}^4$  each independently represent a  $\text{C}_{6-18}$  aryl group or a 5- to 10-membered C-linked heteroaryl group or a 5- to 10-membered heterocyclyl- $\text{C}_{1-6}$  alkyl group optionally substituted by one or more substituents selected from the group consisting of halogen atoms, hydroxyl,  $\text{C}_{1-4}$  alkyl,  $\text{C}_{2-4}$  alkenyl,  $\text{C}_{1-4}$  haloalkyl,  $\text{C}_{1-4}$  alkoxy,  $\text{C}_{1-4}$  haloalkoxy, amino,  $\text{C}_{1-4}$  alkylamino, di( $\text{C}_{1-4}$  alkyl)amino and carboxyl groups.
4. (Previously Presented) A compound according to claim 1 in which  $\text{Z}$

represents an oxygen atom, or a group  $\text{NR}^5$  where  $\text{R}^5$  represents a hydrogen atom, a methyl group, ethyl group or longer straight-chain alkyl group or branched alkyl group containing up to 9 carbon atoms or a  $\text{C}_{6-18}$  aryl group or a 5- to 10-membered C-linked heteroaryl group or a 5- to 10-membered heterocyclyl- $\text{C}_{1-6}$  alkyl group optionally substituted by one or more substituents selected from the group consisting of halogen atoms, hydroxyl,  $\text{C}_{1-4}$  alkyl,  $\text{C}_{2-4}$  alkenyl,  $\text{C}_{1-4}$  haloalkyl,  $\text{C}_{1-4}$  alkoxy,  $\text{C}_{1-4}$  haloalkoxy, amino,  $\text{C}_{1-4}$  alkylamino,  $\text{di}(\text{C}_{1-4}$  alkyl)amino and carboxyl groups.

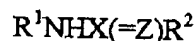
5. (Previously Presented) A compound according to claim 1 in which  $\text{R}^2$  represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group, or a group  $\text{OR}^6$ ,  $\text{SR}^6$ ,  $\text{NH}_2$ ,  $\text{NHR}^6$ , or  $\text{N}(\text{R}^6)_2$  where each  $\text{R}^6$  independently represents a methyl group, ethyl group or longer straight-chain alkyl group or branched alkyl group containing up to 9 carbon atoms, or is a  $\text{C}_{6-18}$  aryl group or a 5- to 10-membered C-linked heteroaryl group or a 5- to 10-membered heterocyclyl- $\text{C}_{1-6}$  alkyl group optionally substituted by one or more substituents selected from the group consisting of halogen atoms, hydroxyl,  $\text{C}_{1-4}$  alkyl,  $\text{C}_{2-4}$  alkenyl,  $\text{C}_{1-4}$  haloalkyl,  $\text{C}_{1-4}$  alkoxy,  $\text{C}_{1-4}$  haloalkoxy, amino,  $\text{C}_{1-4}$  alkylamino,  $\text{di}(\text{C}_{1-4}$  alkyl)amino and carboxyl groups.
6. (Previously Presented) A compound according to claim 1 in which  $\text{R}^1$  represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group; X represents a carbon, phosphorus or sulfur atom; Z represents an oxygen atom or a group  $\text{NR}^5$  in where  $\text{R}^5$  represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group; and  $\text{R}^2$  represents a group  $\text{OR}^6$ ,  $\text{SR}^6$ ,  $\text{NH}_2$ ,  $\text{NHR}^6$ , or  $\text{NH}^2$ , or  $\text{N}(\text{R}^6)_2$  where each  $\text{R}^6$  independently represents a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl or aralkyl group, or a  $10\alpha$ -dihydroartemisinin group.
7. (Previously Presented) A compound according to claim 1 in which  $\text{R}^1$  represents a hydrogen atom, X represents a sulfoxide group  $\text{S}=\text{O}$ , Z represents an oxygen atom, and

$R^2$  represents a group  $NH_2$ , or in which  $R^1$  represents a hydrogen atom, X represents a carbon atom, Z represents a group  $NH$ , and  $R^2$  represents a group  $NHR^6$  where  $R^6$  represents a hydrogen atom or an optionally substituted alkyl, cycloalkyl, aryl or aralkyl group; or in which  $R^1$  represents a hydrogen atom, X represents a carbon atom, Z represents an oxygen atom, and  $R^2$  represents a group  $NHR^6$  where  $R^6$  is a hydrogen atom or an optionally substituted alkyl, cycloalkyl, aryl or aralkyl group.

8. (Currently Amended) A process for the preparation of a compound of the general formula I according to claim 1 which comprises reacting a compound of the formula II comprising an artemisinin nucleus:



in which Y represents a group comprising an oxygen atom attached to the carbon atom of the artemisinin nucleus and also to a hydrogen atom or trimethylsilyl group, with a suitable halogenating agent to form a compound of the formula II in which Y represents a halogen atom; and, if desired, reacting the compound of formula II in which Y represents a halogen atom with an amine of the formula:



where  $R^1$ ,  $R^2$ , X and Z are as defined in claim 1 to form a compound of the formula I.

9. (Canceled.)

10. (Previously Presented) A pharmaceutical composition which comprises a carrier and a therapeutically effective amount of a compound according to claim 1.
11. (Canceled.)
12. (Canceled.)
13. (Previously Presented) A method for treating a disease caused by infection with a parasite which comprises administering to a host in need of such treatment a therapeutically effective amount of a compound according to claim 1.
14. (Previously Presented) A compound according to claim 2 in which  $R^1$  represents a hydrogen atom, a methyl group or an ethyl group.
15. (Previously Presented) A compound according to claim 6 in which  $R^1$  represents a hydrogen atom or an alkyl group; X represents a carbon or sulfur atom; Z represents an oxygen atom;  $R^6$  represents a hydrogen atom or an optionally substituted alkyl or aryl group; or  $R^2$  represents a group  $NH_2$  or a group  $NHR^6$  where  $R^6$  represents an alkyl group, or a group  $N(R^6)_2$  where  $R^6$  represents identical or different alkyl groups.
16. (Previously Presented) A compound according to claim 15 in which  $R^1$  represents a hydrogen atom or a methyl group or an ethyl group; or  $R^2$  represents a group  $NH_2$  or a group  $NHR^6$  where  $R^6$  represents an alkyl group, or a group  $N(R^6)_2$  where  $R^6$  represents identical or different alkyl groups.

**CONDITIONAL PETITION FOR EXTENSION OF TIME**

If entry and consideration of the amendments above requires an extension of time, Applicants respectfully request that this be considered a petition therefor. The Commissioner is authorized to charge any fee(s) due in this connection to Deposit Account No. 14-1263.

**ADDITIONAL FEE**

Please charge any insufficiency of fees, or credit any excess, to Deposit Account No. 14-1263.

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